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Zeng

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(54) **METHOD AND DEVICE FOR PICTURE-BASED BARCODE ENCODING AND DECODING**

(71) Applicant: **INSTITUTE FOR INFORMATION INDUSTRY**, Taipei (TW)

(72) Inventor: **Yi-Chong Zeng**, Keelung (TW)

(73) Assignee: **INSTITUTE FOR INFORMATION INDUSTRY**, Taipei (TW)

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G06K 19/06   (2006.01)

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Primary Examiner — Andrew W Johns

(74) *Attorney, Agent, or Firm* — CKC & Partners Co., Ltd.

(57) **ABSTRACT**

A method for picture-based barcode encoding and decoding is provided herein. The method for picture-based barcode encoding includes: transforming an original data into an original data bitstream; performing an error correction on the original data bitstream for translating the original data bitstream into an error corrected bitstream; selecting all or part of the picture as an encoded area; calculating a data storage capacity of the encoded area; adjusting a size of the error corrected bitstream or a size of the encoded area for equalizing a data storage capacity of an encoded data bitstream and the data storage capacity of the encoded area; and adjusting a pixel value of the encoded area according to the encoded data bitstream.

12 Claims, 9 Drawing Sheets

transforming an original data into an original data bitstream ~ S201

performing error correction on the original data bitstream ~ S202

selecting all or part of the picture as an encoded area ~ S203

calculating a data storage capacity of the encoded area ~ S204

adjusting a size of the error corrected bitstream or a size of the encoded area for equalizing a data storage capacity of an encoded data bitstream and the data storage capacity of the encoded area ~ S205

adjusting a pixel value of the encoded area according to the encoded data bitstream ~ S206